we might insist that nothing prevents interpreting this to mean not only chemical but biological analysis. Thus, the law permits and makes prominent mention of the study of plants in their manifold relations to economic problems, and it remains to be seen if those who carry out its provisions will act as wisely in this regard as the framers of the law have done. No station can give facilities for the pursuance of every line of work contemplated by the law, and those that do a few things well are likely to work more good for the country and bring more credit to themselves than those that scatter their resources among many subjects. Of the things to be done well, the broad and fertile fields of vegetable physiology, pathology and bacteriology offer great expectations of economic and scientific gain to the stations and men who enter them fully equipped for research, and through them to the people at large.

## OPEN LETTERS.

## Typha

I am surprised that Mr. Morong, in his interesting article on Typha, in the Bull. Tor. Bot. Club, p. 4, 1888, does not mention, under the heading of uses, the use of the leaves of these plants in cooperage. In some localities the collecting of these leaves is quite an industry. They are collected, dried in the shade, bound into bundles, and sent to market. When used they are split in halves through the broad diameter, and placed between the joints of headings, and of the staves near the headings. I find, on inquiry, that this is the almost universal method for making tightwork, not only in this country but also in Europe. J. SCHNECK. Mt. Carmel, Ill.

## An odd fuchsia.

A malformed fuchsia which came under my notice a few days ago has five stamens, two of which have become adnate to the pistil. The petals are purple, five in number, and apparently normal. The calyx consists of five sepals, and what is the limb in the normal flower has partially grown together. Fast to this limb, by one edge, have grown two bodies, apparently bracts. In each one the side which adheres is red, like the calyx, while the free half is green and sparingly serrate. At first I thought these bodies were sepals, but as they could be traced to the pedicel of the flower by a prominent line or ridge, I concluded them to be W. A. PUCHNER. Chicago, Ill.

Fragrance of flowers. In regard to the effects of the fragrance of certain flowers upon certain people, of which I have observed several communications in the GAZETTE, I have never been able to sit in a room where lilacs form a bounded nor could I which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made which grows so plantiful able to sit in a room where made in the sit in a room where made which grows so plantiful able to sit in a room where made in the sit in a room where made in the sit in a room where made in the sit in a room where in the sit in a room where it is a sit in a room where it is a sit in a room where it is a room where the room where it is a ro which grows so plentifully along the country roadsides. I have tried